DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES
Office of Structural Materials
Quality Assurance and Source Inspection

Bay Area Branch
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Contract #: 04-0120F4
Cty: SF/ALA Rte: 80 PM: 13.2/13.9
File #: 1.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter
Address: 333 Burma Road
City: Oakland, CA 94607

Report No: WIR-026063
Date Inspected: 16-Aug-2011

Project Name: SAS Superstructure
Prime Contractor: American Bridge/Fluor Enterprises, a JV
Contractor: American Bridge/Fluor Enterprises, a JV

OSM Arrival Time: 700
OSM Departure Time: 1530
Location: Job Site

CWI Name:	Bernie Docena / Pat Swain			**CWI Present:**	☑ Yes	☐ No	
Inspected CWI report:	☐ Yes	☐ No	☑ N/A	**Rod Oven in Use:**	☑ Yes	☐ No	☐ N/A
Electrode to specification:	☑ Yes	☐ No	☐ N/A	**Weld Procedures Followed:**	☑ Yes	☐ No	☐ N/A
Qualified Welders:	☑ Yes	☐ No	☐ N/A	**Verified Joint Fit-up:**	☐ Yes	☐ No	☑ N/A
Approved Drawings:	☐ Yes	☐ No	☑ N/A	**Approved WPS:**	☑ Yes	☐ No	☐ N/A
				Delayed / Cancelled:	☐ Yes	☑ No	☐ N/A

Bridge No: 34-0006
Component: OBG Components

Summary of Items Observed:

Quality Assurance Inspector (QA) William Clifford was at the American Bridge/Fluor (ABF) job site at Yerba Buena Island in California between the times noted above in order to monitor Quality Control functions and the in process work being performed by ABF personnel. The following items were observed:

East Line
Approximately:

8:30 this QA observed QC Bernie Docena perform Magnetic Particle (MT) of completed welds at E4-PP80-L#2, 4. The welds were completed the previous work day by ABF welding personnel Mike Jiminez #4671 and were ground flush prior to Docena performing MT.

8:50 this QA was informed that Mr. Docena could not get the MT yolk to stay on reliably due to current interruptions in the unit. Testing was halted so that a suitable MT unit could be attained.

9:30 this QA was informed that a replacement MT had been acquired and testing was then reinitiated. Mr. Docena reexamined the previously tested areas due to the unreliable findings of the first MT unit. Mr. Docena recorded no rejectable indications at this time.

This QA randomly observed ABF/JV qualified welder Salvador Sandoval #2202 performing Shielded Metal Arc Welding (SMAW) with 1/8" diameter E7018H4R electrode and implementing Caltrans approved Welding Procedure Specification (WPS) ABF-WPS-D15-1110A-R1. The joint being welded was a 14mm plate insert at the "A" deck to close the lifting lug deck penetration holes. This work was located at E3-PP92-L#1, 3 and was performed in the overhead position from the bottom side of the "A" deck.

During welding, ABF Quality Control (QC) Bernie Docena was noted monitoring the welding parameters.

Welding parameters were recorded as (A=135).

Approximately 9:45 this QA observed QC Bernie Docena perform Magnetic Particle (MT) of back gouged weld at this panel point 92 location. Docena recorded no rejectable indications at this time.

Approximately 10:45 this QA randomly observed ABF/JV qualified welder Jorge Lopez #6149 performing Shielded Metal Arc Welding (SMAW) with 5/32" diameter E7018H4R electrode and implementing Caltrans approved Welding Procedure Specification (WPS) ABF-WPS-D15-1050A-CU. The joint being welded was a 14mm plate insert at the A deck to close the lifting lug deck penetration holes. This work was located at E3-PP100-L#1 and was performed in the flat position from the top side of the "A"deck.

During welding, ABF Quality Control (QC) Bernie Docena was noted monitoring the welding parameters. Welding parameters were recorded as (A=150).

This QA randomly observed ABF/JV qualified welder Mike Jiminez #4671 performing Shielded Metal Arc Welding (SMAW) with 1/8" diameter E7018H4R electrode and implementing Caltrans approved Welding Procedure Specification (WPS) ABF-WPS-D15-1110A-R1. The joint being welded was a 14mm plate insert at the "A" deck to close the lifting lug deck penetration holes. This work was located at E4-PP79-L#2, 4 and was performed in the overhead position from the bottom side of the "A" deck.

During welding, ABF Quality Control (QC) Bernie Docena was noted monitoring the welding parameters. Welding parameters were recorded as (A=125). Initial welding (pre NDT) was completed at this location at approximately 13:25, a 24 hour hold time is required before QC NDT.

Approximately 13:30 this QA observed QC Bernie Docena perform Magnetic Particle (MT) of back gouged weld at this panel point E4-PP79-L#1, 3 location. Mr. Docena recorded no rejectable indications at this time.

11E/12E

This QA randomly observed ABF/JV qualified welder Jimmy Zhen #6001 performing Flux Core Arc Welding w/gas (FCAW-G) and implementing Caltrans approved Welding Procedure Specification (WPS) ABF-WPS-D15-3042B-1. The joints being welded were in the 3G vertical position at the side plate E1 on the outside of the OBG 11E/12E.

During welding, ABF Quality Control (QC) Steve Jensen was noted monitoring the welding parameters. Welding parameters were recorded as (A=165/V=24.8).

11W/12W

This QA randomly observed ABF/JV qualified welder Xiao Jian Wan #9677 performing Shielded Metal Arc Welding (SMAW) with 1/8" diameter E9018-MH4-R electrode and implementing Caltrans approved Welding Procedure Specification (WPS) ABF-WPS-D15-1012-3. The joint being welded was an internal longitudinal stiffener butt splice designated as L#4 on the "E" side of "A" plate, 11W/12W segment splice location.

During welding, ABF Quality Control (QC) Pat Swain was noted monitoring the welding parameters. Welding parameters were recorded as (A=123/V=20.5/T=77/HI=1.9).

Approximately 11:30 this QA observed QC Pat Swain perform Visual Testing (VT) of back gouged weld at this location. Mr. Swain recorded no rejectable indications at this time.

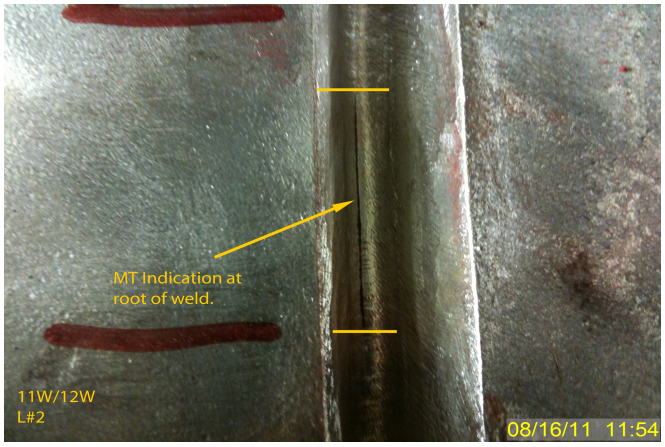
This QA randomly observed ABF/JV qualified welder Hua Qiang Huang #2930 performing Shielded Metal Arc Welding (SMAW) with 1/8" diameter E9018-MH4-R electrode and implementing Caltrans approved Welding Procedure Specification (WPS) ABF-WPS-D15-1012-3. The joint being welded was an internal longitudinal

stiffener butt splice designated as L#2 on the "C" side plate, 11W/12W segment splice location.

During welding, ABF Quality Control (QC) Pat Swain was noted monitoring the welding parameters. Welding parameters were recorded as (A=124/V=20/T=69/HI=2.1).

Approximately 11:50 this QA observed QC Pat Swain perform Magnetic Particle (MT) of back gouged weld at this location. Mr. Swain recorded no rejectable indications at this time.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.



Summary of Conversations:

At approximately 7:30 this QA spoke with QC Pat Swain regarding QC's on site copy of ABF-WPS-D15-1012-3. Parameter ranges for "volts", "amp", and "travel speed" on QC's copy did not match the stamped copy on file in the QA office.

Parameters recorded for the welding process were found to be acceptable to QA's stamped copy in that QC's copy set a narrower range of acceptable readings.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact SMR Nina Choy (510) 385-5910, who represents the Office of Structural Materials for your project.

Inspected By:	Clifford,William	Quality Assurance Inspector
Reviewed By:	Levell,Bill	QA Reviewer